The toll of motor vehicle crash fatality in Montana American Indians: 1999 to 2004

Prepared to provide information to the Montana Senate Judiciary Committee

by

Public Health and Safety Division

Department of Public Health and Human Services

February 8, 2007

Objectives:

 To assess the burden of motor vehicle occupant deaths among American Indians and whites living on or near the seven reservations in Montana, as well as those living elsewhere in Montana.

Methods:

- County of residence used to define "on or near reservation"
 - Blackfeet (Glacier, Pondera, Toole)
 - Rocky Boys (Hill, Chouteau)
 - Fort Belknap (Blaine, Phillips)
 - Fort Peck (Daniels, Roosevelt, Sheridan, Valley)
 - Crow/Northern Cheyenne (Big Horn, Rosebud)
 - Flathead (Lake, Sanders)
 - Non-Reservation (all other counties)

Methods:

- Number of motor vehicle occupant deaths between 1999 and 2004
- Proportion of all deaths among motor vehicle occupants
- Median age of death
- Age-adjusted motor vehicle occupant mortality rates

Figure 1. Number of motor vehicle occupant deaths among American Indians and whites, by location, Montana, 1999-2004.

| | White | Am. Indian | |
|--|----------|------------|-----|
| | | | |
| Location (Counties on or near Reservation) | n (%) | n (%) | N |
| Blackfeet | 19 (32) | 41 (68) | 60 |
| Northern Cheyenne/Crow | 13 (19) | 56 (81) | 69 |
| Fort Belknap | 10 (32) | 21 (68) | 31 |
| Rocky Boys | 17 (65) | 9 (35) | 26 |
| Fort Peck | 16 (46) | 19 (54) | 35 |
| Flathead | 50 (59) | 35 (41) | 85 |
| Non-Reservation counties | 601 (96) | 25 (4) | 626 |
| Total | 726 (78) | 206 (22) | 932 |

Figure 2. Of all deaths, the proportion due to motor vehicle crashes among American Indians and whites, by location, Montana, 1999-2004.

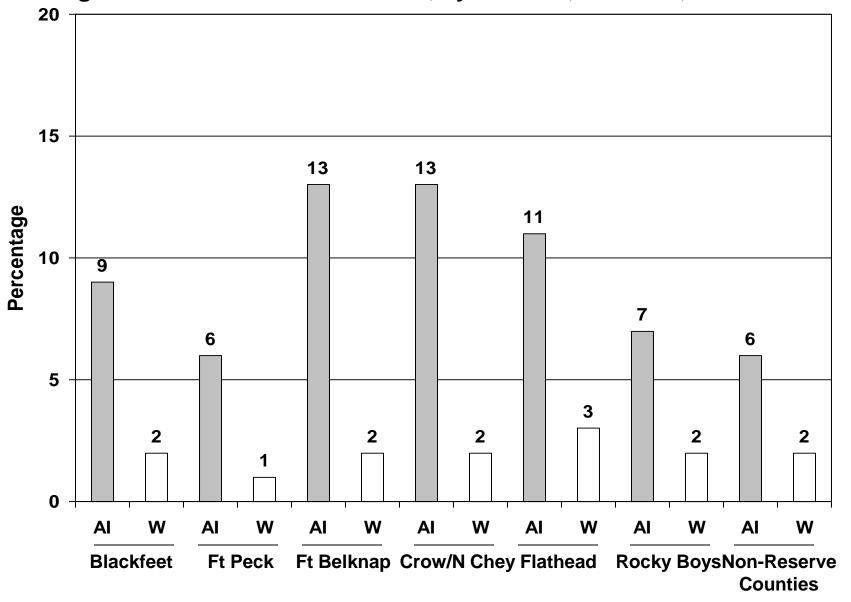


Figure 3. Median age of motor vehicle occupant deaths among American Indians and whites, by location, Montana, 1999-2004.

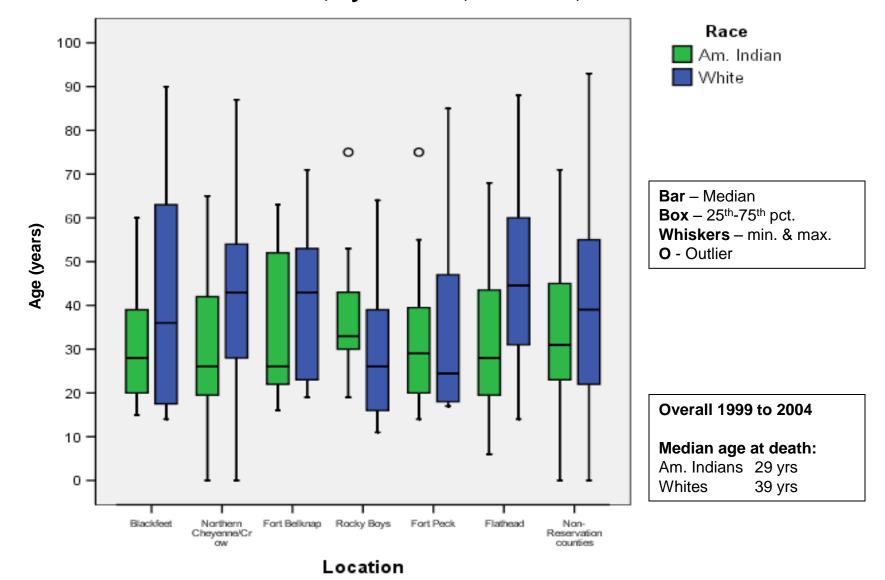
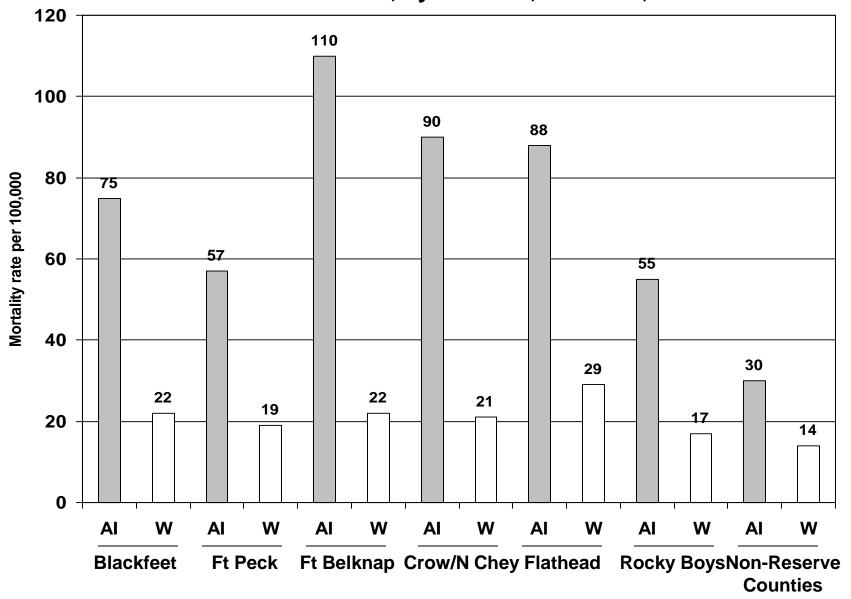


Figure 4. Age-adjusted motor vehicle occupant mortality rates among American Indians and whites, by location, Montana, 1999-2004.



Conclusions:

- Proportion of all deaths due to motor vehicle crashes is higher in Indians compared to whites.
- Median age at death approximately 10 years younger in American Indians compared to whites in Montana.
- MVC mortality rates higher in American Indians compared to whites in Montana.
- MVC mortality rates American Indians and whites in Montana are significantly higher than American Indians/Alaska Natives (four times) and whites (two times) in the U.S. (data available on request).
- Implementing effective prevention strategies could significantly reduce the number of deaths among motor vehicle occupants here in MT.

Effective Prevention Strategies:

- Primary seatbelt law
- Requirements for child safety seats
- Graduated drivers license law
- Preventing alcohol impaired driving